

HOW MUCH HOUSING DOES GREATER TORONTO NEED?

By HUMPHREY CARVER

Humphrey Carver, A.R.I.B.A., was educated in England, both in the social sciences and in architecture, before coming to Canada in 1930. He worked with a Town Planning firm and in partnership with a Landscape Architect. He lectured at the University of Toronto School of Architecture before serving in the Army for 3½ years. To the R.A.I.C. Journal and to many other Canadian periodicals he has contributed articles on Housing and Community Planning.

This is a brief digest of a report prepared by Mr. Humphrey Carver for the Toronto Reconstruction Council. The report itself deals in considerable detail with the reasoning, the calculations and the statistical material on which this summary statement is based. It is the first of a series of reports on the housing problems of metropolitan Toronto to be prepared at the School of Social Work in the University of Toronto. Funds for this research project, which is to continue for a year or more, have been provided by grants from the City of Toronto (through the Reconstruction Council), the Central Mortgage and Housing Corporation and the Department of Planning and Development of the Ontario Government.

It should be pointed out that this is a purely quantitative study of housing requirements, and does not seek to imply either that there will be an effective economic demand for the calculated number of housing units or that the building industry will be capable of filling such a demand. The calculations are simply based on the assumption that a desirable housing condition will exist in Greater Toronto when each family or household can be accommodated in a separate dwelling unit, whether single house, duplex, or apartment.

(Copies of the full report entitled "How Much Housing Does Greater Toronto Need?" (51 pages, XIII tables) can be obtained from the Toronto Reconstruction Council, 522 University Avenue, Toronto. Price 50 cents.)

SINCE the economic collapse of 1930 insufficient housing accommodation has been constructed in the Toronto area to accommodate the continual growth of population. The development of industries during the war accelerated the migration into this metropolitan area at a time when little new housing could be constructed. On returning to their own community the veterans have consequently found that there is no accommodation in which they can establish homes of their own. They were the last to arrive in town, and are the outstanding victims of a shortage that had been stacking up for a long time.

How extensive is this need for housing the families of veterans? And how much housing should be built in the Toronto area during the coming years in order to make up the shortage and to keep pace with the normal requirements of an expanding city? This report attempts to answer these questions.

The Housing Requirements of the Veterans

In order to obtain first-hand knowledge of the housing problem with which returning veterans are faced, a survey was taken in February and March, 1946, of 5,000 men being discharged from the army in Toronto. Almost half the whole number surveyed were single men returning to their parents' homes. Eighteen per cent of the whole number were married men returning to a home that they either owned (8.6 per cent) or rented (9.7 per cent.). The remaining 36 per cent. were married men who are in need of housing. About a third of these have children. Of the whole 5,000 surveyed.

20.8%	had wives at present living with parents.
9.9%	" " " in rented rooms.
2.3%	" " " with another family.
3.0%	" " " overseas.

36.0%

Since July, 1945, veterans have been returning from overseas to the Toronto area at the rate of about 4,000 a month, more than 32,000 having returned to this community by the end of February. If it may be assumed that all of these were faced by the same situation recorded by the 5,000 men surveyed, then it is apparent that the total requirements for housing married veterans in the metropolitan area is about 11,500 housing units, or 36 per cent. of 32,000. This must be regarded as a distinctly conservative estimate, since it does not take account of the 10,000 men who had already returned from overseas between January and July, 1945, nor does it include all those servicemen being discharged from the forces stationed in Canada. And what of the unmarried veterans now returning to their parents' houses, but regarding marriage and the possession of a home of their own as an essential feature of their re-establishment?

How has housing construction been keeping pace with this demand? In July, 1945, the Department of Labour initiated a periodic survey of residential construction. Between July and December, 1945, 3,747 dwelling units were found to be under construction in the Toronto area. By the end of the year 709 of this number had been

completed and the remainder were in various stages of completion.

1,360 units were 0 - 25 per cent completed
 812 units were 26 - 50 per cent completed
 663 units were 51 - 75 per cent completed
 384 units were 76 - 99 per cent completed

If it may be assumed that all the 3,747 units under construction during the period will have been completed by July, 1946, then the total requirements of married veterans will theoretically have been reduced from 11,500 to 7,773. This would, of course, only be true if each family that moved into a new house released an equivalent accommodation. But many of those moving into new housing will have been previously doubled up and so the needs of the married veterans will not in fact be filled in direct proportion with the number of new houses built.

How Much Housing Should be Built in the Toronto Metropolitan Area During the Next Ten Years?

The plans of the building industry and of public authorities must be based on some reasonable estimate of the need for housing in order that a steady volume of production may be maintained at a scale that will meet the requirements of the community. It is convenient to arrange the calculations of shortage and of required normal production under five headings; the total may then be summarized and the programme spread over ten years with a quota of annual production established.

TABLE
Increases of Population and Housing —
Toronto Metropolitan Area.

	(A) Increases in Population 1931 - 1945	(B) Increases in Housing Units 1931 - 1945	Ratio of (A) to (B) Number of Persons per Unit
Toronto City	60,278	8,052	7.4
Forest Hill Village	9,421	2,405	3.91
Leaside Town	9,234	2,866	3.22
Long Branch Village	1,683	410	4.10
Mimico Town	2,957	654	4.52
New Toronto Town	3,863	600	*(6.43)
Swansea Village	2,749	694	3.96
Weston Town	1,731	504	3.43
Scarborough Township	7,270	2,132	3.31
York Township	22,546	4,602	4.89
East York Township	14,217	3,778	3.76
North York Township	15,446	4,926	3.13
Etobicoke Township	12,203	3,562	3.56
<hr/>			
Suburban			
Municipalities	103,320	27,815	3.71
Metropolitan Area	163,598	35,867	4.56

*Records for residential construction in New Toronto are only available from 1937, and it is not therefore possible to present valid figures for this ratio. There are reasons for believing that this approximation is not far from the truth.

(a) The Accumulated Shortage.

The shortage that has accumulated since 1931 can be measured by recording the number of housing units built during the period and comparing this number with the increases of population as enumerated by the assessment departments.

In the suburban municipalities 27,815 dwelling units were built between 1931 and 1945, while at the same time the population in the suburban area increased by 103,320. This gives a proportion of 3.75 persons to each additional dwelling. In the same period there have been 8,052 units constructed within the limits of the City of Toronto, for an increased population of 60,278, giving a proportion of 7.48 persons per dwelling.

It has been shown by the 1941 Housing Census that the average number of persons in a suburban household is 3.8. It may, therefore, be concluded that in the 1931-1945 period residential construction in the suburban areas kept pace with the spilling of population into those areas. But by the same criterion it is evident that a large surplus population had accumulated within the city limits for which no equivalent amount of housing had been constructed. To house the city's increased population at the rate of 3.75 persons per dwelling would have required 16,076 dwelling units to be constructed between 1931 and 1945. Since only 8,052 were in fact constructed there was an apparent shortage of 8,024 units.

But, unfortunately this by no means completes the calculations of housing shortage, because the enumeration of the civilian population in the area was concluded by the end of August, 1945, and does not therefore include all the servicemen who have returned to the community since that time. An examination of the local ration-book issue indicates that an additional 48,000 should be included in the population figures in order to bring the calculations up to date. Since we know from the 5,000 sample survey that about 18 per cent. of discharged men were already householders and would therefore have been enumerated in the population assessment, this additional number may be reduced to 39,000. If this figure is incorporated in the calculations of housing shortage it must be concluded that the real shortage is not 8,024 but 18,255 housing units. In other words, there was already a calculable shortage of about 8,000 at V-E Day and a further shortage of 10,000 has been revealed as servicemen's families have been reunited during the last nine months. It will be observed that this corresponds closely with the information derived from the survey of 5,000 discharged soldiers.

(b) The Vacancy Rate.

In any community the number of dwelling units must exceed the number of households by a certain margin in order to provide for flexibility of movement as family groups are re-deployed under changing circumstances. Since 1905 the average proportion of vacant single-family dwellings has been 2.95 per cent. For apartments the rate has been 10.05 per cent. since records of such accom-

modation began in 1927. This margin of safety, the "vacancy rate," has been eliminated by the present housing shortage and must be regarded as a requirement additional to the making up of the shortage as calculated above. It is commonly regarded as desirable that the vacancy rate for single-family dwellings should be 2 per cent. and for apartments 6 per cent. In the Toronto metropolitan area the vacancies should therefore be:

2% of the 160,000 single-family dwellings	3,200 units
6% of the 40,000 apartments, duplexes, etc.....	2,400 units
Total	5,600 units

The fact that the City of Toronto has actually been able to absorb a large increase of population, particularly during the war years, has demonstrated that a certain margin of safety has existed. This absorption has been achieved almost entirely by adapting and converting the existing older residential buildings in the city. As a result of this process of improvisation the City Assessment Department was able to report the creation of more than 5,000 additional dwelling units in the 1931-1945 period over and above the number of new dwellings constructed according to the records made by the Commissioner of Buildings. For the immediate future it may be assumed that these improvised units will continue to fulfil their marginal function. In the present calculations, therefore, only the 3,200 single-family dwellings are regarded as an essential part of the building programme.

(c) To House the Expected Increase of the Population.

The population of the metropolitan area is now about 950,000, and appears to be increasing at the rate of about 11.5 per cent. per decade. This is based on the figures of the last Census decade during which the population of the suburban areas increased 30 per cent. while the population within the city increased 4 per cent.

There are some indications that the increase during the next ten years may exceed this proportion. Studies that have been made by the federal Department of Labour indicate that the drift of population towards the large metropolitan centres is characteristic of the present processes of industrialization and urbanization in Canada. The growth of Greater Toronto during the war years should not be regarded as an eccentric or temporary phenomenon, but rather as an acceleration of a continuing trend. Furthermore the economic prosperity of the war years has revitalized the reproductive capacity of the people so that by natural increase as well as by in-migration the population is likely to expand more vigorously than it did during the pre-war decade.

Altogether it seems reasonable to expect an increase of 110,000 in the population during the 1946-1956 period. If 3.8 is accepted as the average number of persons per household, about 29,000 additional housing units will be required to accommodate this number.

(d) Reconstruction of Slum Areas.

A wealth of evidence has been produced over recent years to show that certain blighted residential areas within the city must be reconstructed if Toronto is to maintain proper standards of health for its citizens. During 1944 the City Planning Board examined these areas in considerable detail and made specific recommendations for their re-development. These areas were designated as:

	Area	Population
(1) Regent Park, North	42.2 acres	3,717
(2) Regent Park, South	64.7 acres	3,647
(3) Yorkville	41.2 acres	1,601
(4) Trinity Park	52.6 acres	7,569
Total	200.7 acres	16,534

Assuming that the average number of persons in each household within these areas is 4.3 (the average for the city as a whole), then the number of dwelling units required to re-house this population would be about 3,800.

(e) Replacement of Obsolete Housing.

Quite apart from the special urgency of slum-clearance, it is becoming necessary to plan for the systematic replacement of the city's residential accommodation in order that Toronto may remain a modern city, and adjust itself to contemporary standards of living. During the last ten years 1,712 dwellings have been demolished within the city. At this rate it would take more than a thousand years to replace the existing housing in metropolitan Toronto.

If it may be assumed that the reasonable lifetime of a dwelling unit is 50 years, then it is necessary for a community to replace two per cent. of its housing each year. In Greater Toronto there are now more than 200,000 dwelling units; replacement should therefore be at the rate of 4,000 units a year, or 40,000 in ten years, if the average age of its residential accommodation is not to exceed 50 years.

In its 1944 diagnosis of the city's condition the City Planning Board described 50 per cent. of the residential areas of the city as "declining", and recommended a systematic conversion of those neighbourhoods in order to arrest internal deterioration of the city and check the continued flight to the suburbs. This whole process of replacement and replanning of residential areas is a procedure on which Toronto has hardly yet begun, but which, with the maturity of the city, must now be regarded as an essential part of future housing programmes. While the city's internal industrial areas were expanding there was a spontaneous process of replacement as older residential districts were overtaken by commercial and industrial uses. But the adult metropolis has now germinated new industrial nuclei, and the flexibility of road transport and electric power have made suburban sites more suitable for industrial uses. Mean-

while the older residential areas have become stagnant, and they no longer attract a stable population that can maintain the amenities and values that formerly existed in those parts of the city.

In projecting a replacement programme of 40,000 units during the next decade a distinction should be drawn between

- (1) Housing that must be considered physically obsolescent on measurable standards and whose continued existence might be reasonably regarded as a threat to the welfare of its inhabitants. It should be recalled that the 1941 Housing Census enumerated in the Toronto area 18,000 dwelling units that required external repair and about 25,000 that either had no private flush toilet or no private bathing arrangements.
- (2) Housing in declining neighbourhoods which has not fallen below the accepted minimum standards of shelter but which should be systematically replaced in order that internal neighbourhoods may continue to hold a stable population and not progressively deteriorate in quality and value.

It appears that a replacement of 20,000 units during the next decade should be regarded as essential since this would no more than maintain an average dwelling life-time of 100 years and replace units which were sub-standard by Housing Census criteria in 1941 and by 1956 would be fifteen years older. The replacing of another 20,000 units must be regarded as a matter of community planning policy and civic housekeeping. There are, of course, many dwellings that are structurally sound at the age of 75 years and some even at 250 years; but at our present standard of building there are just as many which are obsolete and unadaptable at the age of 30 years. From a long-term point of view it would therefore probably be wise to anticipate the need to replace at a 50-year cycle.

SUMMARY OF METROPOLITAN TORONTO'S HOUSING REQUIREMENTS

Under normal circumstances any community should be building an amount of housing at least sufficient to accommodate the increase of population and to effect the normal process of replacement. For metropolitan Toronto this represents an annual volume of about 7,000 units (see (c) and (e) below); this may be regarded as the normal scale of production at which Toronto's building

industry should be geared to operate. At the present time, however, a backlog has been allowed to accumulate (see (a), (b) and (d) below), because the industry has not been operating at an adequate volume. It may be argued that the priority obligations to make up the shortage and clear certain slum areas should be fulfilled before the full scale of replacement can be taken in hand. If it is advisable to scale down the programme, it may be necessary to postpone replacement of the 20,000 units referred to in (e) (2) below and thus establish a ten-year goal of 74,000 housing units.

Since the annual average production of housing in metropolitan Toronto over the last fifteen years has been 2,400 units, it is obvious that the placing of such a load upon the economy of the building industry and the community must introduce decisions of high policy. It is not the purpose of this report to recommend that such a programme should be accomplished, but merely to record the conclusions reached by an objective appraisal of Toronto's housing requirements. Lest it be thought, however, that the accomplishment of such a programme is fantastically beyond the potentiality of any community, it may be of interest to view the magnitude of the task against the background of actual housing experience. During the period 1935-1939 the 41,000,000 people of England and Wales produced an average of 334,000 dwelling units a year. To match this record, in proportion with its population, metropolitan Toronto would need to produce 7,330 units each year. The English figures, however, refer to a total urban and rural population, so that it may be presumed that the urban population of a North American city is not incapable of producing at a relatively greater annual volume, if it wished to do so.

Summarizing the requirements that have been calculated above, the following ten-year programme may be composed:

	<i>Number of Housing Units</i>
(a) Accumulated shortage.....	18,000
(b) Restoration of vacancy rate.....	3,200
(c) To house increase of population.....	29,000
(d) Reconstruction in slum areas.....	3,800
(e) Replacement—	
(1) To replace obsolescent housing.....	20,000
(2) To maintain normal process of replacement at 50-year cycle.....	20,000
	———— 40,000
Total programme for post-war decade....	94,000



JOURNAL

ROYAL ARCHITECTURAL INSTITUTE OF CANADA

Serial No. 251

TORONTO, JULY, 1946

Vol. 23, No. 7

PRESIDENT CHARLES DAVID (F)

C O N T E N T S

EDITORIAL	156
THE AUDITORIUM AND STAGE IN YOUR COMMUNITY CENTRE, John A. Russell	157
R.I.B.A. PRIZES AND STUDENTSHIPS	163
RICH'S-PROGRESSIVE ARCHITECTURE COMPETITION	164
GARAGE, TORONTO BRANCH, THE CANADIAN RED CROSS SOCIETY, Page and Steele, Architects	168
BROMO-SELTZER LIMITED, TORONTO, Earle C. Morgan, Architect	170
HOW MUCH HOUSING DOES GREATER TORONTO NEED? Humphrey Carver	171
THE HOUSES ARE NOT COMING, Fred Lasserre	175
THE INSTITUTE NOTES, CORRESPONDENCE, ETC.	178

THE INSTITUTE DOES NOT HOLD ITSELF RESPONSIBLE
FOR THE OPINIONS EXPRESSED BY CONTRIBUTORS

EDITORIAL BOARD

F. BRUCE BROWN, CHAIRMAN

ERIC R. ARTHUR (F), EDITOR

R. A. D. BERWICK, Vancouver; MURRAY BROWN (F), Toronto; C. S. BURGESS (F), Edmonton; ROBT. F. DUKE, Saskatoon; A. H. EADIE, Toronto; GLADSTONE EVANS, Toronto; LESLIE R. FAIRN (F), Wolfville; GORDON FOWLER, Toronto; LAWRENCE J. GREEN, Winnipeg; EARLE C. MORGAN, Toronto; H. CLAIRE MOTT (F), Saint John; JAS. A. MURRAY, Toronto; H. E. MURTON, Hamilton; FORSEY PAGE (F), Toronto; JOHN B. PARKIN, Toronto; W. A. SALTER, St. Catharines; J. ROXBURGH SMITH (F), Montreal; ROBT. M. WILKINSON, Toronto.

J. F. SULLIVAN, PUBLISHER

Editorial and Advertising Offices - - - - - 57 Queen Street West, Toronto 1

SUBSCRIPTION RATES

Canada and Newfoundland—Three Dollars per year. Great Britain, British Possessions, United States and Mexico—Five Dollars per year. All Other Countries—Six Dollars per year. Single Copies—Canada 50 Cents; Other Countries 75 Cents.